

efficacy than latanoprost in controlling the IOP for patients with ocular hypertension or glaucoma.

## PEY6

**A PUBLIC HEALTH IMPACT MODEL OF ANECORTAVE ACETATE IN WET AGE-RELATED MACULAR DEGENERATION**  
 Deschaseaux-Voinet C<sup>1</sup>, Lafuma A<sup>1</sup>, Berdeaux G<sup>2</sup>

<sup>1</sup>Cemka Eval, Bourg-la-Reine, Hauts de Seine, France; <sup>2</sup>Alcon France SA, Rueil-Malmaison, Hauts de Seine, France

**OBJECTIVE:** This study aimed at estimating the potential public health impact of Retaane 15mg (anecortave acetate suspension) in age-related macular degeneration. **METHODS:** Based on clinical trial results and literature, a Markov model was built to compare anecortave acetate to best supportive care (BSC) during the lifetime of ARMD patients. Patients entering the model were 75 years of age with a new diagnosis of wet ARMD in one eye. This model took into account the efficacy of anecortave acetate to slow deterioration and delay visual disability, the probability for a patient to develop the disease in the fellow eye, and mortality. Results of the model were expressed in terms of duration of low vision (with blindness in one eye) and blindness in both eyes. Health consequences of blindness and low vision were estimated for depression and hip fractures as well as for institutionalization. Duration of the model was 25 years and the cycle length was 1 month. The fellow eye could be affected in 30% of the patients at five years. Premature mortality associated with blindness and low vision was estimated. **RESULTS:** Anecortave acetate decreased the number of prevalent blind cases by 20% and the average time with blindness by 30%. Depression prevalent cases were decreased by 21% and those with hip fracture by 10%. The number of patients who were institutionalized was decreased by 27%. Decrease in life expectancy due to premature mortality associated with blindness and low vision could be estimated at 17% in the BSC group and 15.5% in the anecortave acetate group. Life expectancy was increased by 3 months. **CONCLUSION:** Anecortave acetate presents important and favorable potential public health outcomes in patients with wet ARMD. According to the model it could reduce the rates of depression, hip fractures and institutionalization, and increase life expectancy compared with BSC.

## PEY7

**NUMBER OF TREATABLE EYES WITH WET SUB-FOVEAL AGE-RELATED MACULAR DEGENERATION (ARMD) : USE OF DIRECT STANDARDIZATION AND MARKOV MODEL**

Moore N<sup>1</sup>, Blin P<sup>1</sup>, Berdeaux G<sup>2</sup>

<sup>1</sup>CHU de Bordeaux—Université Victor Segalen—INSERM U657, Bordeaux, Gironde, France; <sup>2</sup>Alcon France SA, Rueil-Malmaison, Hauts de Seine, France

**OBJECTIVE:** To estimate the number of treatable eyes with wet sub-foveal ARMD in France. **METHODS:** Surveys documenting wet ARMD incidence rate were searched in the literature. Direct standardization according to age and gender was performed using INSEE demographic data. Projection at year 2025 was performed using OECD data. A 75 years old cohort was simulated using a 7-states Markov model. Mean treatment duration of New Chemical Entity is not known today and therefore was fixed arbitrarily at 2 years. The probability to develop ARMD in the fellow eye was fixed at 30% at 5 years. Monthly death incidence rate was modeled from INSEE mortality tables. The time horizon of the model was 25 years and the cycle length one month. Sensitivity analyses were performed. **RESULTS:** 3 surveys were identified. The Rotterdam Study, the only one performed in the EU, was chosen as the best proxy for France. In 2005, 30,192 citizens will develop ARMD in the first eye; of

those 17,585 will be wet and 13,805 will be wet sub-foveal (Olsen, 2004). Taking into account the fellow eye, mortality and the base case scenario treatment duration, the number of wet sub-foveal treatable eyes would be 37,019. Treatment duration is the most sensitive parameter of the model. Number of eyes would be 18,899, 53,204, 67,535, and 80,162 for a treatment duration of 1, 3, 4 and 5 years, respectively. The number of treatable eyes will increase by 7.1% if probability to develop the disease in the second eye is 40%, and decrease by -9.0% if it is 20%. A 2% yearly increase is expected till 2025 due to population aging and the 1950s' baby-boom. **CONCLUSION:** According to our model, the number of sub-foveal wet ARMD treatable eyes would be 37,019, in France. Average treatment duration was the most sensitive parameter.

## PEY8

**EYE ADVERSE EFFECTS ASSOCIATED WITH POLYVINYL ALCOHOL TEAR DROPS AFTER LASER ASSISTED SUBEPITHELIAL KERATECTOMY (LASEK)**

Flores C<sup>1</sup>, Luque L<sup>2</sup>, Gomez MC<sup>3</sup>, Avila L<sup>4</sup>, Natera MA<sup>5</sup>

<sup>1</sup>Instituto de Investigaciones Oftalmológicas, Sevilla, Sevilla, Spain;

<sup>2</sup>Consultorio de Burguillos, Burguillos, Sevilla, Spain; <sup>3</sup>ZBS Velez Norte,

Velez Malaga, Malaga, Spain; <sup>4</sup>ZBS Axarquía oeste, Almachar, Malaga,

Spain; <sup>5</sup>ZBS Axarquía Oeste, Benamargosa, Malaga, Spain

**OBJECTIVE:** LASEK is one of the current surgical technique to correct refractive errors of the eye, such as myopia, hyperopia, and astigmatism. In this method, the corneal epithelial flap is lifted then replaced after laser ablation of the subepithelial cornea. The hinged flap is created by epithelial marking and exposure of the marking ethyl alcohol (20%) for 5 seconds. **METHODS:** LASIK (Laser in Situ Keratomileusis) is a surgical procedure to correct myopia by corneal stroma subtraction. It involves the use of a microkeratome to make a lamellar dissection of the cornea creating a flap with intact corneal epithelium. After the flap is lifted, the underlying midstroma is reshaped with an excimer laser and the flap is returned to its original position. We have detected eighteen cases where the treatment of patients that had been subjected to LASEK with polyvinyl alcohol artificial tear drops provoked eye adverse effects. Toxicogenic keratitis, partial epithelium detachment, and allergic and toxicogenic conjunctivitis were observed. These adverse effects disappeared upon discontinuing tear drops administration and reappeared after their reintroduction. We used the Naranjo et al. algorithm to confirm the cause-effect relationship. **RESULTS:** All cases were confirmed as definitive. **CONCLUSION:** We have not observed any case of eye adverse effect in patients subjected to LASIK caused by polyvinyl alcohol tear drops.

## PEY9

**COST-EFFECTIVENESS MODEL FOR AGE-RELATED MACULAR DEGENERATION: COMPARING MACUGEN TO VISUDYNE**

Earnshaw SR<sup>1</sup>, Javitt JC<sup>2</sup>, Zlateva GP<sup>3</sup>, Pleil AM<sup>4</sup>, Graham CN<sup>1</sup>, Brogan AJ<sup>1</sup>, Shah SN<sup>5</sup>, Adamis AP<sup>6</sup>

<sup>1</sup>RTI Health Solutions, Research Triangle Park, NC, USA; <sup>2</sup>Wilmer

Ophthalmological Institute, Baltimore, MD, USA; <sup>3</sup>Pfizer Global

Pharmaceuticals, New York, NY, USA; <sup>4</sup>Pfizer Incorporated, San Diego,

CA, USA; <sup>5</sup>Pfizer, Inc, New York, NY, USA; <sup>6</sup>Eyetech Pharmaceuticals,

New York, NY, USA

**OBJECTIVE:** To develop a health-economic assessment for Macugen, a new treatment for age-related macular degeneration (AMD). A comprehensive model compares Macugen (pegaptanib sodium), indicated for all patients with neovascular AMD, relative to the existing photodynamic therapy with Visudyne (verteporfin). **METHODS:** A Markov framework was used to model the lifetime movement of an AMD cohort through five